Amendments to the specification:

Please replace paragraph [0012] with the following amended paragraph:

[0012] Another technique for depositing metals is sustained self-sputtering (SSS). Examples are described by Fu et al. in U.S. Pat. No. 6,692,617 issued February 17, 2004 ~~U.S. Patent Application Serial No. 08/854,008, filed May 8, 1997~~ and by Fu in U.S. Pat. No. 6,183,614 B1 issued February 6, 2001. For example, at a sufficiently high plasma density adjacent a copper target, a sufficiently high density of copper ions develops that the copper ions will resputter the copper target with yield over unity. The supply of argon working gas can then be eliminated or at least reduced to a very low pressure while the copper plasma persists. Aluminum is believed to be not readily susceptible to SSS. Some other materials, such as Pd, Pt, Ag, and Au can also undergo SSS.

Please replace paragraph [0023] with the following amended paragraph:

[0023] Plasma etching or resputtering of a variety of materials such as opaque metal conductor materials may be controlled in a reactor system such as a sputter reactor system. An example of such a reactor system is illustrated generally at 138 in Figs. 3 and 6. In this reactor system, selected aspects of both SIP and ICP plasma generation techniques, are utilized, either in separate steps or at the same time in a reactor chamber 140 in a manner similar to that described in copending application Serial No. 10/202,778, now abandoned. For example, an SIP film may be sputter deposited into a high-aspect ratio via. In addition, bottom coverage may be thinned or eliminated by ICP resputtering of the bottom of the via while upper portions of a liner layer sidewall may be protected from resputtering by sputtering an ICP coil 141 located

within the chamber 140 to deposit coil material onto the substrate. Resputtering of the layer bottom may be ended when the layer bottom is sufficiently thinned such that atoms of the underlying layer are exposed and sputtered. These underlying layer atoms may be detected within the plasma by a detector 142 which detects the light emitted by the underlying layer material atoms through a folded radiation path 143.

Please replace paragraph [0072] with the following amended paragraph:

[0072] ICP argon ions are accelerated toward the barrier layer 351 via an electric field (e.g., the RF signal applied to the substrate support pedestal 162 via the second RF power supply ~~41~~ 202 of FIG. ~~2~~ 6 which causes a negative self bias to form on the pedestal), strike the barrier layer 351, and, due to momentum transfer, sputter the barrier layer material from the base of the via aperture and redistribute it along the portion of the barrier layer 351 that coats the sidewalls of the via 349. The argon ions are attracted to the substrate in a direction substantially perpendicular thereto. As a result, little sputtering of the via sidewall, but substantial sputtering of the via base, occurs. To facilitate resputtering, the bias applied to the pedestal and the wafer may be 400 watts, for example.